

Mr. Stephen Dixon  
Delphi Delco Electronics Systems  
P.O. Box 9005, M.S. A107  
Kokomo, Indiana 46904-9005

Dear Mr. Dixon:

Re: Exempt Construction and Operation Status,  
067-11384-00061

The application from Delphi Delco Electronics Systems, received on September 28, 1999, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emergency diesel-fueled generators, to be located at 2100 E. Lincoln Street, Kokomo, Indiana, is classified as exempt from air pollution permit requirements:

- (a) A five hundred (500) KW emergency diesel-fueled generator, with a maximum fuel consumption rate of 241 lbs/hr (36.2 gal/hr), and exhausting at one (1) stack, identified as 8-K25-1.
- (b) A seventy (70) KW emergency diesel-fueled generator, with a maximum fuel consumption rate of 31 lbs/hr (4.7 gal/hr), and exhausting at one (1) stack, identified as Plt 1, Stk3.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

This existing source has submitted their Part 70 application T 067-6506-00061 on September 4, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

DH

cc: File - Howard County  
Howard County Health Department  
Air Compliance - Ryan Hillman  
Permit Tracking - Janet Mobley  
Technical Support and Modeling - Michele Boner  
Compliance Data Section - Karen Nowak  
Part 70 Application File - T-067-6506-00061

## Indiana Department of Environmental Management Office of Air Management

### Technical Support Document (TSD) for an Exemption

#### Source Background and Description

**Source Name:** Delphi Delco Electronics Systems  
**Source Location:** 2100 E. Lincoln Street, Kokomo, Indiana 46904  
**County:** Howard  
**SIC Code:** 3672  
**Operation Permit No.:** 067-11384-00061  
**Permit Reviewer:** Daniel Harper

The Office of Air Management (OAM) has reviewed an application from Delphi Delco Electronics Systems relating to the construction and operation of a five hundred (500) kilowatt and a seventy (70) kilowatt emergency diesel-fueled generator.

#### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) A five hundred (500) KW emergency diesel-fueled generator, with a maximum fuel consumption rate of 241 lbs/hr (36.2 gal/hr), and exhausting at one (1) stack, identified as 8-K25-1.
- (b) A seventy (70) KW emergency diesel-fueled generator, with a maximum fuel consumption rate of 31 lbs/hr (4.7 gal/hr), and exhausting at one (1) stack, identified as Plt 1, Stk3.

#### Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

#### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 067-10500-00061, issued on January 22, 1999.

#### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
8-K25-1	diesel generator	25	0.44	4117	1035
Plt 1, Stk 3	diesel generator	40	0.25	444	860

## Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on September 28, 1999.

## Emission Calculations

See pages 5 and 6 in Appendix A of this document for detailed emissions calculations.

## Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	0.16
PM-10	0.06
SO <sub>2</sub>	0.2
VOC	0.0
CO	1.2
NO <sub>x</sub>	5.3

## Actual Emissions

No previous emission data has been received from the source.

## County Attainment Status

The source is located in Howard County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Howard County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Howard County has been classified as attainment or unclassifiable for all pollutants.

Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### **Part 70 Permit Determination**

This existing source has submitted their Part 70 (T-067-6506-00061) application on September 4, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

### **State Rule Applicability - Individual Facilities**

#### **326 IAC 5-1-2 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

None of the listed air toxics will be emitted from this source.

### **Conclusion**

The construction and operation of the two (2) emergency diesel-fueled generators shall be subject to the conditions of the attached proposed Exempt Construction and Operation Status 067-11384-00061.

Appendix A: Emissions Calculations  
VOC and Particulate  
From Emergency Diesel-Fueled Generators

Company Name: Delphi Delco Electronics Systems  
Source Address: 2100 E. Lincoln Street, Kokomo, Indiana  
Permit: Exempt Construction and Operation Status 067-11384  
Plt ID: 067-00061  
Reviewer: D. Harper  
Date: 10/14/99

Elliott Magnetek Model 70 RD 70 kW Diesel Generator

$$\text{NO}_x: \frac{(104 \text{ hp}) (500 \text{ hr}) (0.031 \text{ lb NO}_x) (1 \text{ ton})}{(1) (\text{year}) (\text{hp-hr}) (2000 \text{ lb})} = 0.8 \text{ ton NO}_x/\text{year}$$

CO: 0.2 ton CO/year  
SO<sub>x</sub>: 0.05 ton SO<sub>x</sub>/year  
PM-10: 0.06 ton PM-10/year  
CO<sub>2</sub>: 29.9 ton CO<sub>2</sub>/year

from AP-42, Table 3.3-1:

<u>Pollutant</u>	<u>Emission Factor (lb/hp-hr) (power output)</u>
NO <sub>x</sub>	0.031
CO	6.68 E-03
SO <sub>x</sub>	2.05 E-03
PM-10	2.20 E-03
CO <sub>2</sub>	1.15

Elliott Magnetek Model 500 RD 500 kW Diesel Generator

$$\text{NO}_x: \frac{(749 \text{ hp}) (500 \text{ hr}) (0.024 \text{ lb NO}_x) (1 \text{ ton})}{(1) (\text{year}) (\text{hp-hr}) (2000 \text{ lb})} = 4.5 \text{ ton NO}_x/\text{year}$$

CO: 1 ton CO/year  
SO<sub>x</sub>: 1.5 ton SO<sub>x</sub>/year  
CO<sub>2</sub>: 217 ton CO<sub>2</sub>/year  
PM: 0.1 ton PM/year

from AP-42, Table 3.4-1:

<u>Pollutant</u>	Emission Factor (lb/hp-hr) (power output)
NO <sub>x</sub>	0.024
CO	5.5 E-03
SO <sub>x</sub> <sup>a</sup>	8.09 E-03
CO <sub>2</sub>	1.16
PM	0.0007

<sup>a</sup>Assume sulfur content is 1%.